

**Amendments to the Claims:**

This listing of the claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) An apparatus for monitoring the medical condition of a patient, said apparatus comprising:

a monitoring device which during use monitors one or more clinical features of the patient;

a predictive instrument arranged to receive output from the monitoring device and programmed to compute a probability of a medical outcome or diagnosis based on the monitored one or more clinical features, said predictive instrument further programmed to compute said probability by executing an algorithm which models said medical outcome or diagnosis; and

an a user interface through which a user enters information characterizing the patient, wherein said predictive instrument is further programmed to request said algorithm from a remote location.

2. (Original) The apparatus of claim 1 wherein the monitoring device is an electrocardiograph.

3. (Original) The apparatus of claim 2 wherein the algorithm enables the predictive instrument to compute said probability using a regression equation.

4. (Original) The apparatus of claim 3 wherein the regression equation is of the form:

$$P = 100 \left[ 1 - \frac{1}{1 + e^{b_0 + \sum b_i x_i}} \right]$$

wherein P is the probability of medical outcome or diagnosis,  $b_0$  is a constant, the  $x_i$ 's are explanatory variables, and the  $b_i$ 's are coefficients of corresponding explanatory variables.

5. (Original) The apparatus of claim 4 wherein P is a probability of acute cardiac ischemia.

6. (Original) An apparatus for enabling a remotely located predictive instrument to compute a probability of a medical outcome or diagnosis based on monitored one or more clinical features of a patient, said apparatus comprising:

a data storage area which stores a plurality of different algorithms, each of which models a corresponding medical outcome or diagnosis; and

a server which is programmed to respond to a request from a remote device by retrieving a selected one of said plurality of different algorithms from said data storage and forwarding the selected algorithm to the remote device.

7. (Original) The apparatus of claim 6 wherein the request contains a patient profile and the server identifies which of the plurality of different algorithms is the selected algorithm based on the received patient profile.

8. (Currently Amended) A method for evaluating a medical condition of a patient, said method comprising:

~~receiving input characterizing the patient;~~

electronically requesting from a server at a remote location an algorithm for computing a probability of a medical outcome or diagnosis;

~~electronically retrieving receiving from a the server at the remote location, an location~~  
~~said algorithm for computing a the probability of a medical outcome or diagnosis;~~

~~monitoring one or more clinical features of a the patient; and~~

~~using the retrieved received algorithm to compute the probability of the medical outcome or diagnosis for the patient and based on the monitored one or more features.~~

9. (New) The apparatus of claim 1 wherein said predictive instrument is programmed to request said algorithm from a server at the remote location.

10. (New) The apparatus of claim 9 wherein said apparatus further comprises a communication interface for communicating with the server over a network and wherein the predictive instrument is programmed to send a request for said algorithm through the communication interface.

11. (New) The apparatus of claim 10 wherein the predictive instrument is further programmed to send a patient profile along with the request for said algorithm and to receive said algorithm from the server through communication interface.

12. (New) The apparatus of claim 11 wherein the patient profile characterizes a specific population to which the patient belongs and said algorithm is tailored for use with members of that specific population.

13. (New) The apparatus of claim 10 wherein the predictive instrument is further programmed to specify in the request an analysis type which corresponds to the medical outcome or diagnosis for which the probability will be computed.

14. (New) The apparatus of claim 7 wherein the request identifies an analysis type and the server is programmed to retrieve an algorithm from the data storage area that corresponds to the identified analysis type.

15. (New) The apparatus of claim 7 wherein each algorithm among said plurality of algorithms is for computing a probability of a corresponding medical outcome or diagnosis based on monitored one or more clinical features of a patient.

16. (New) The method of claim 8 further comprising receiving input about the patient and wherein requesting involves sending information characterizing a population to which the patient belongs, said characterizing information based on the information received about the patient.

17. (New) The method of claim 16 wherein the received input about the patient includes information from the group consisting of age, race, gender, medical history, and vital signs.

18. (New) The method of claim 8 wherein requesting involves identifying an analysis type and wherein the received algorithm corresponds to the identified analysis type.

19. (New) The method of claim 18 wherein the analysis type relates to cardiac disorders.

20. (New) The method of claim 18 wherein the analysis type relates to a member from the group consisting of cardiac disorders, vascular disorders, neurologic disorders, infectious diseases, and general surgery outcomes.

21. (New) The apparatus of claim 1 wherein the predictive instrument includes a local repository for storing code which is to be executed by the predictive instrument and wherein the predictive instrument is programmed to request said algorithm from the remote location for storage in the local repository.